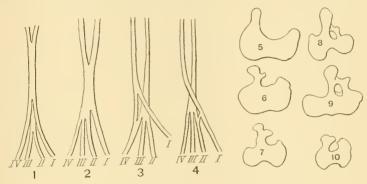
form as *Procnius*, this organ being very susceptible to modifications dependant on food or mode of feeding.

In my previous paper I said that the differences between the Macropterygidæ and the other Swifts were as great as those between the Crows and Swallows; in this I am prepared to go farther and to say that they are greater than those existing between any two families of Passeres with which I am acquainted.



EXPLANATION OF FIGURES.

Deep plantar tendons of 1, Tachornis gracilis; 2, Chatura pelagica; 3, Macropteryx coronata; 4, Florisuga mellivora.

Proximal end of left tarsus of 5, Micropus apus; 6, Chatura pelagica; 7, Cypseloides niger; 8, Campylopterus hemileucurus; 9, Macropteryx coronata; 10, Tachornis gracilis.

NOTES ON CERTAIN FLYCATCHERS OF THE GENUS EMPIDONAX.

BY WILLIAM BREWSTER.

Green-crested Flycatcher. Empidonax virescens (Vieill.).

The name *Empidonax acadicus* has been so long established and so generally used that despite its obvious inappropriateness it is indeed a pity that it must be discarded. But there is apparently no alternative, as can be shown in a few words. The

Muscicapa acadica of Gmelin (Syst. Nat., I, 1788, p. 947) was based on the "Lesser-Crested Flycatcher" of Pennant (Arctic Zoology, II, 1785, p. 386, n. 268) and the former author's diagnosis is an almost literal translation into Latin of the latter's description which is as follows:—

"268. Lesser-Crested. Fl. With a small backward crest: head, neck, and back, of a dirty light cinereous green: breast and belly whitish, tinged with yellow: wings and tail dusky; coverts crossed with two bars of white; secondaries edged with white: legs black. Place. Inhabits *Nova Scotia*.— Capt. *Davies*."

This characterization is obviously too vague and general to be determinable. It fits E. traillii quite as well as E. acadicus, and it can be applied without much violence to autumnal specimens of E. minimus. Of course doubts on this score have been long since acknowledged and expressed; nor would they alone at this late day justify any serious question of the established application of the name acadica — an application which has become fixed and current by a certain process of exclusion and by long usage - were it not that we now know definitely what was only half suspected by the ornithologists of the past generation, viz., that the so-called "Acadian Flycatcher" is not a bird of "Acadia" at all. On the contrary, its normal range along the Atlantic seaboard does not extend to the northward of Long Island, although there are, of course, two or three records of its chance occurrence in southern New England. This being the case it would seem to be no longer possible to maintain that this southern Empidonax could have been the original Muscicapa acadica, for both Pennant and Gmelin name only Nova Scotia as the habitat of their bird, and the mention by the former of the person — Captain Davies, — from whom apparently he received his specimen, gives his statement as to its origin a certain definiteness which allays any suspicion that a mistake may have been made on this point.

These considerations would seem to make it imperative to select another name for the bird which has been so long called *Empidonax acadicus*. The earliest name available is apparently *Platyrhynchos virescens* Vieillot (Nouv. Dict. d'Hist. Nat., XXVII, 1818, 22) based on Wilson and hence unmistakably referable

to this species. Wilson's name, Muscicapa querula (Am. Orn., II, 1810, p. 77, pl. 13, f. 3), is, of course, still earlier, but it is preoccupied by Muscicapa querula [= Contopus virens] Vieillot (Ois. Am. Sept., I, 1807, p. 68, pl. 39). Dr. Coues has said (Birds N. W., 1874, p. 250) that "if acadica be set aside as indefinite or inapplicable" it will be necessary to take, "if belonging here," Muscicapa subviridis Bartram, but this is a mere "nomen nudum."

Should these conclusions be granted and *Empidonax acadicus* of recent American writers become *Empidonax virescens* (Vieill.), it would also seem advisable to change the name Acadian Flycatcher to Green-crested Flycatcher, for the bird was generally known to the earlier American ornithologists as the Small Green-crested Flycatcher.

TRAILL'S FLYCATCHER. Empidonax traillii (Aud.).

The breeding range attributed to this Flycatcher has puzzled ornithologists not a little, - and with good reason, for east of the Alleghany Mountains the bird appears to be practically confined to the Canadian fauna, whereas in the Mississippi Valley it breeds at least as far south as southern Illinois; in the one case associating (in a faunal sense) with such northern birds as Swainson's Thrushes, Winter Wrens, Canada Jays and Three-toed Woodpeckers, in the other with such southern forms as Carolina Wrens, Tufted and Carolina Titmice, Cardinal and Blue Grosbeaks and Bachman's Sparrow. I have long suspected, however, that the Traill's Flycatcher of Ohio, Indiana and southern Illinois is not the same bird as that which breeds in northern New England, and a recent examination of the material in the collection of the United States National Museum and Department of Agriculture has confirmed this impression which, it may be added, is now shared by Mr. Ridgway, Dr. Merriam and Capt. Bendire, who have also given the matter careful attention.

I did not at first suppose that the question affected more than the identification of certain of the Mississippi Valley specimens, but it proves to have a broader significance, as will be presently shown. The type locality of *Muscicapa traillii* Aud. was the

"prairie lands of the Arkansas river" (Orn. Biog., Vol. I, 1831, p. 236). Fortunately three of Audubon's specimens, given by him many years ago to Professor Baird and labeled by Mr. Ridgway as the types of E. traillii, are preserved in the National Museum. They are numbered respectively 960, 1865 and 2039. The first two are old birds, the last is a young bird in the first plumage. Although they bear no records of locality Mr. Ridgway thinks that there is practically no doubt that they were collected by Audubon himself on the Arkansas River. In any case they may be regarded as authentic representatives of Audubon's species and since they agree closely in every respect with a number of summer specimens from Ohio and southern Illinois, it seems fair to assume that the Flycatcher which breeds throughout the central portions of the Mississippi Valley is the true E. traillii. comparing it with a large series of E. pusillus from west of the Plains, I fail to find any differences by which the two may be separated. It is true that *pusillus* is subject to a good deal of what appears to be local variation and that some of its representatives from west of the Plains are larger and grayer than any of the Mississippi Valley skins, but others are positively indistinguishable from the latter. Considered as a whole the series of breeding birds which I have examined from the United States at large, west of the Alleghanies and south of the 42nd parallel, may be regarded, without much violence, as belonging to one and the same form.

The name which this form should bear is a matter of some uncertainty for although *Platyrhynchus pusillus* Swainson antedates *Muscicapa traillii* Audubon by several years it is not determinable by Swainson's original description (Syn. Mex. Birds, Phil. Mag., I, 1827, p. 366). In the Fauna Boreali-Americana (Part second, 1831, pp. 144–146) this author describes and figures under the name "*Tyrannula pusilla* (Swainson)" a Flycatcher taken at "Carlton House, lat. 53° N., May, 1827," which he says is smaller than the *T. querula* of Wilson [= *Empidonax virescens* (Vieillot)] "particularly in the bill, which is rather broader towards the middle, although formed on the same model," and in respect to the wings which "are much shorter" measuring "only 2" inches" in length. He

also says "before we had investigated the natural affinities of the Flycatchers, we described this bird as possibly belonging to the genus Platyrhynchus. . . . A fine specimen in our collection from the shores of Mexico agrees with that brought home by the Expedition." The Mexican specimen here referred to must have been the type of Platyrhynchus pusillus, and the specimen "brought home by the Expedition" the bird killed at Carlton House in 1827. If Swainson's statement that the two were practically identical can be trusted it becomes more than ever doubtful if the name pusilla has been correctly applied, for, as Baird has hinted (Birds N. A., 1858, p. 195), and Coues definitely suggested (Birds N. W., 1874, p. 252 — under synonomy of E. pusillus), there are some reasons for believing that the description and figure given in the Fauna Boreali-Americana may have related to E. minimus. At all events they cannot be referred with any degree of confidence to either E. traillii or the so-called E. pusillus. It is said, however, that some of Swainson's types are still preserved at Cambridge, England. If the type of his Platyrhynchus pusillus is among them it should be re-examined with especial reference to the question here involved. But until this has been done by some one who is familiar with the nice distinctions which must be relied on to determine our North American Empidonaces it seems to me that we are justified in ignoring the name pusillus and adopting - or rather retaining - that of traillii for the Flycatcher which we have just been considering.

Empidonax traillii alnorum, new subspecies. ALDER FLY-CATCHER.

Subspec. char.— Differing from E. traillii (i. e., E. "pusillus" of Baird and subsequent authors) in having the coloring of the upper parts richer and more olivaceous, the wing bands yellower and hence more conspicuous, the bill decidedly smaller and the legs rather shorter. Type No. 1367, collection W. B., 3 ad., Upton, Maine, June 3, 1872.

There is of course nothing new about this separation or the characters on which it is based. Indeed, all of the latter — as

well as certain others which I have been unable to verify and for this reason have omitted—were pointed out by Baird, in 1858 (Birds N. A., 1858, pp. 194, 195) and they have been restated more or less fully by innumerable subsequent writers. It is simply a case of renaming a bird which was accurately distinguished nearly forty years ago and has since passed current as a valid form but to which the name of the very bird from which it was intended to separate it has been inadvertently applied.

Baird apparently did not have the Audubonian specimens before him when he made the comparison of traillii and pusillus above referred to. At least he does not allude to them in the text nor are they included in his tabular lists. The series of what he considered to be true traillii comprised nine examples, of which one came from New Hampshire, seven from Carlisle, Pennsylvania, and one from Mexico. The Carlisle birds were all taken in May and were unquestionably migrants on their way to northern New England or New York. Hence it is evident that his impressions of traillii were based on material which did not really represent that bird.

I must confess to a certain sense of relief that, as has been just shown, the responsibility for the above separation rests mainly on shoulders other and broader than mine; for while I honestly believe it to be based on intrinsically sound characters, the differences between the two birds in question are, after all, so slight and so difficult of verification without the aid of large series of specimens for comparison that the identification of individual specimens by descriptions alone is an almost hopeless task. This, however, is by no means a novel condition among *Empidonaces*, for this puzzling group includes several forms which are positively known to be distinct species, but which in the dried skins cannot always be distinguished with either ease or certainty.

The respective breeding ranges of *E. traillii* and *E. t. alnorum* cannot be mapped at present with entire precision, but I have had no hesitation in referring to the former all the breeding specimens that I have examined from the Mississippi Valley south of the 42nd parallel of latitude, and from North America at large west of the Plains, including skins from Fort Resolution on Great Slave

Lake, Fort Simpson on the Mackenzie River, Nulato on the upper Yukon, and British Columbia.

E. t. alnorum breeds in the Maritime Provinces, New England and New York, the northern part of the Lower Peninsula of Michigan (I have several typical specimens from Oden which is situated about twenty miles south of the Straits of Mackinac), and doubtless at many other points in the region lying immediately about the Great Lakes, but just how far to the westward it extends and whether or not its breeding range in the Mississippi Valley reaches sufficiently far southward to impinge on or closely approach that of true traillii, I am wholly ignorant.

SEVENTH SUPPLEMENT TO THE AMERICAN ORNITHOLOGISTS' UNION CHECK-LIST OF NORTH AMERICAN BIRDS.

Since the publication of the Sixth Supplement to the A. O. U. Check-List the Committee on Classification and Nomenclature of North American Birds has held two sessions, having in hand the preparation of a new edition of the Check-List, as well as current questions relating to species and subspecies, and to changes in nomenclature proposed since the preparation of its last report (cf. Auk, XI, 1894, pp. 46–51). The sessions of the Committee were held in Washington. Jan. 15–18, 1894, and Feb. 12, 13, 1895, all the members of the Committee being present. In view of the proposed early publication of the second edition of the Check-List, all questions known to the Committee were considered, including nearly all of those originating in the present (April) number of 'The Auk.' Some of the latter still await final action.